

CLAIM AMENDMENTS

Please cancel claims 4, 7-9, 13, 16-30, 33-35, and 41-44 without prejudice or disclaimer.

Please amend claims 1-3, 5-6, 10-12, 14-15, 31, 36, and 38 as follows.

1. (Currently Amended) A method for controlling a remote display device, comprising:
defining a service-specific protocol to facilitate remote control of a service provided by the remote display device, wherein the service-specific protocol defines display commands that are used to display content on the display device by sending display commands and data pertaining to the display content from the host computer to the remote device over the network communication link;

sending data corresponding to the service provided by the remote display device via a host-side software module running on [[a]] the host computer in a format defined by the service-specific protocol from the host computer to the remote display device over a network communication link; and

sending control commands from the host computer to the remote display device based on the service-specific protocol to cause the remote display device to perform the service using the data that are sent to the remote display device.

2. (Original) The method of claim 1, wherein the network communication link is established by:

connecting the host computer to a network to which at least one remote device is already connected;

obtaining an IP address for the host computer;

broadcasting a search message over the network requesting that any device meeting a search criteria defined by data contained in the search message to contact the host computer using the IP address for the host computer;

listening for a response to the search message, and in response thereto:

retrieving a description of a service provided by a remote device that responds to the search message to obtain a port number that may be used to communicate with the service;
and

opening a TCP (transmission control protocol) socket that uses the port number.

3. (Currently Amended) The method of claim 1, wherein ~~the remote device comprises a display device and~~ the service-specific protocol further defines ~~display~~ commands that are used to display ~~content~~ streaming video on the display device by sending ~~display~~ streaming video commands and data pertaining to the ~~display~~ streaming video content from the host computer to the remote device over the network communication link.

4. (Canceled).

5. (Currently Amended) The ~~method~~ machine-readable media of claim 31, wherein the ~~service provided by the remote device comprises an input service and the service-specific protocol comprises an input protocol defining a plurality of input primitives~~ [[,]] are further to comprising:

listen~~[[ing]~~ for input data from the remote device, wherein the input data has a format corresponds to said plurality of input primitives; and

interpret~~[[ing]]~~ the input data to generate input commands based on the input protocol.

6. (Currently Amended) A method for enabling interaction between a remote audio device and a host computer, comprising:

discovering a service provided by the remote audio device;

establishing a network communication link between the remote audio device and the host computer;

launching a host-side software module to run on the host computer to enable interaction with the service via a service protocol that is specific to the service and a client-side component running on the remote audio device, wherein the service protocol includes audio commands that are used to playback audio content on the audio device by sending audio commands and audio data pertaining to the audio content from the host computer to the audio device over the network communication link;

sending data corresponding to the service from the host computer to the remote audio device over the network communication link;

sending commands from the host computer to the remote audio device based on the service protocol; and

performing service operations corresponding to the service with the remote audio device that employ the data sent to the remote audio device and are performed in response to the commands received from the host computer.

Claims 7-9. (Canceled).

10. (Currently Amended) The method of claim 6, wherein establishing the network communication link comprises:

connecting the remote audio device to a network to which the host computer is already connected;

obtaining an IP address for the remote ~~display~~ audio device;

broadcasting information pertaining to the service provided by the remote audio device that includes a location from which a description of the service can be retrieved;

retrieving the description of the service to obtain a port number that may be used to communicate with the service; and

opening a TCP (transmission control protocol) socket that uses the port number.

11. (Currently Amended) The method of claim 10, wherein a DHCP (Dynamic host configuration protocol) host is connected to the network and obtaining an IP address comprise:

submitting a request from the remote audio device to the DHCP host for an IP address; and

allocating an IP address to the remote audio device via the DHCP host in response to the request.

12. (Currently Amended) The method of claim 10, wherein the remote ~~display~~ audio device obtains an IP address by performing the operations of:

automatically allocating itself an IP address selected from a pre-defined range of IP addresses;

verifying that the IP address that is automatically allocated is not used by any other device or host connected to the network, and

if the IP address is already in use, selecting another IP address and repeating the foregoing operations until a unique IP address for the network is obtained.

13. (Canceled).

14. (Currently Amended) The method of claim 6, wherein discovering the service provided by the remote audio device comprises:

providing a network location from which a description of the service may be retrieved;
and

retrieving the description of the service from the network location.

15. (Currently Amended) The method of claim 6, wherein the service protocol defines feedback primitives that are used to enable the remote audio device to send feedback data to the -host computer.

Claims 16-30. (Canceled).

31. (Currently Amended) A machine-readable media on which a plurality of instructions are stored that when executed by the processor of a host computer perform the operations of:

interacting with a remote device to discover a service provided by the remote device,
wherein the remote device comprises an input service;

interacting with the remote device to establish a network communication link between the remote device and the host computer;

sending data corresponding to the service from the host computer to the remote device over the network communication link;

sending commands from the host computer to the remote device over the network communication link based on a service protocol that is specific to the service provided by the remote device to cause the remote device to perform service operations specified by the commands that employ the data sent to the remote device, wherein the service protocol includes

input primitives to enable input data to be sent from the remote device to be interpreted by the host-side software module running on the host computer.

32. (Original) The machine-readable media of claim 31, wherein establishing the network communication link comprises performing the operation of:

broadcasting a search message from the host computer over the network requesting that any device meeting a search criteria defined by data contained in the search message to contact the host computer using a network address assigned to the host computer;

retrieving a description of a service provided by a remote device that responds to the search message to obtain a port number that may be used to communicate with the service; and opening a TCP (transmission control protocol) socket that uses the port number.

Claims 33-35. (Canceled).

36. (Currently Amended) A device comprising:

a network interface;

a memory in which a plurality of machine instructions are stored comprising a set of client-side software to control a service provided by the device in response to service protocol specific data and commands received by the device having a format defined by a protocol specific to the service; and

a controller, coupled to the network interface and the memory, to execute said plurality of machine instructions to perform the operations of:

interacting with a remote host computer to establish a network communication link via the network interface with the remote host computer; and

in response to receiving service protocol specific data and commands that are pushed to the device from the remote host computer over the network communications link, performing service operations specified by the commands that employ the data,

wherein the device further includes a display coupled to the controller, and the service provided by the device comprises a streaming video service that is driven by commands defined by the service specific protocol to cause the device to display streaming video on the display in

response to receiving data and display commands from the remote host computer over the network communication link.

37. (Original) The device of claim 36, wherein the network communication link is established by performing the operations of:

broadcasting device identification and service information identifying a service provided by the device and a communications port via which other devices connected to the network including the remote host computer may communicate with the device;
opening a TCP/IP socket via the communications port.

38. (Currently Amended) The device of claim 36, wherein the ~~device further includes a display coupled to the controller, and the~~ service provided by the device further comprises a display streaming video service that is driven by display streaming video commands defined by the service specific protocol to cause the device to display streaming video content on the display in response to receiving data and display streaming video commands from the remote host computer over the network communication link.

39. (Original) The device of claim 36, wherein the device comprises a display adapter that further includes an interface to couple to a display, and the service provided by the device comprises a display service that is driven by display commands defined by the service specific protocol to cause the device send display content to the display in response to receiving data and display commands from the remote host computer over the network communication link.

40. (Original) The device of claim 36, further comprising an audio driver coupled to the controller and speakers, and wherein the service specific protocol includes audio commands that are used to cause the device to playback audio content in response to receiving audio commands and audio data pertaining to the audio content from the remote host computer over the network communication link.

Claims 41-44. (Canceled).